FOR OFFICIAL USE ONLY

CONTROLLER TAG		I/O DESCRIPTION	I/O	REMARKS
DDC-90065006A	VFD-900613501A	WELL WATER PUMP P-90035001A IN REMOTE	DI	VIA NETWORK CONNECTION
DC-90065006A	VFD-900613501A	WELL WATER PUMP P-90035001A DUNING	<u>DI</u>	VIA NETWORK CONNECTION
DC-90065006A DC-90065006A	VFD-900613501A VFD-900613501A	WELL WATER PUMP P-90035001A RUNNING WELL WATER PUMP P-90035001A TROUBLE	DI DI	
DDC-90065006A	VFD-900613501A	WELL WATER PUMP P-90035001A TROOBEE	DI	VIA NETWORK CONNECTION
DC-90065006A	VFD-900613501A	WELL WATER PUMP P-90035001A SPEED CONTROL	AO	
DDC-90065006A	VFD-900613501A	WELL WATER PUMP P-90035001A SPEED	Al	VIA NETWORK CONNECTION
DDC-90065006A	VFD-900613501A	WELL WATER PUMP P-90035001A REMOTE START/STOP	DO	
DDC-90065006A	P-90035001A	WELL WATER PUMP P-90035001A BEARING TEMPERATURE	Al Al	
DDC-90065006B	VFD-900613501B	WELL WATER PUMP P-90035001B IN REMOTE	DI	VIA NETWORK CONNECTION
DC-90065006B	VFD-900613501B	WELL WATER PUMP P-90035001B IN LOCAL	DI	VIA NETWORK CONNECTION
DDC-90065006B	VFD-900613501B	WELL WATER PUMP P-90035001B RUNNING	DI	
DC-90065006B	VFD-900613501B	WELL WATER PUMP P-90035001B TROUBLE	DI	
DDC-90065006B	VFD-900613501B	WELL WATER PUMP P-90035001B PERMISSIVE RESET	DI	VIA NETWORK CONNECTION
DDC-90065006B DDC-90065006B	VFD-900613501B VFD-900613501B	WELL WATER PUMP P-90035001B SPEED CONTROL WELL WATER PUMP P-90035001A SPEED	AO AI	VIA NETWORK CONNECTION
DDC-90065006B	VFD-900613501B	WELL WATER PUMP P-90035001A SPEED WELL WATER PUMP P-90035001B REMOTE START/STOP	DO	VIA NETWORK CONNECTION
DC-90065006B	P 90035001B	WELL WATER PUMP P-90035001B BEARING TEMPERATURE	Al	
DDC-90065006C	VFD-900613501C	WELL WATER PUMP P-90035001C IN REMOTE	DI	VIA NETWORK CONNECTION
DC-90065006C	VFD-900613501C	WELL WATER PUMP P-90035001C IN LOCAL	DI	VIA NETWORK CONNECTION
DDC-90065006C DDC-90065006C	VFD-900613501C VFD-900613501C	WELL WATER PUMP P-90035001C RUNNING WELL WATER PUMP P-90035001C TROUBLE	DI DI	
DDC-90065006C	VFD-900613501C	WELL WATER PUMP P-90035001C PERMISSIVE RESET	DI	VIA NETWORK CONNECTION
DDC-90065006C	VFD-900613501C	WELL WATER PUMP P-90035001C SPEED CONTROL	AO	VII (I CONTROL CONTRO
DDC-90065006C	VFD-900613501C	WELL WATER PUMP P-90035001A SPEED	Al	VIA NETWORK CONNECTION
DDC-90065006C	VFD-900613501C	WELL WATER PUMP P-90035001C REMOTE START/STOP	DO	
DDC-90065006C	P-90035001C	WELL WATER PUMP P-90035001C BEARING TEMPERATURE	Al	
)DC 00085004	VFD-900613501D	WELL WATER PUMP P-90035001D IN REMOTE		IVIA NIETWODY CONNECTION
DDC-90065001A DDC-90065001A	VFD-900613501D VFD-900613501D	WELL WATER PUMP P-90035001D IN REMOTE WELL WATER PUMP P-90035001D IN LOCAL	DI DI	VIA NETWORK CONNECTION VIA NETWORK CONNECTION
DDC-90065001A	VFD-900613501D	WELL WATER PUMP P-90035001D RUNNING	DI	TELLIZIONE CONTROL
DDC-90065001A	VFD-900613501D	WELL WATER PUMP P-90035001D TROUBLE	DI	
DDC-90065001A	VFD-900613501D	WELL WATER PUMP P-90035001D PERMISSIVE RESET	DI	VIA NETWORK CONNECTION
DDC-90065001A	VFD-900613501D	WELL WATER PUMP P-90035001D SPEED CONTROL	AO	IVIA NIETWORK CONTRIBUTION
DC-90065001A	VFD-900613501D	WELL WATER PUMP P-90035001A SPEED WELL WATER PUMP P-90035001D REMOTE START/STOP	Al	VIA NETWORK CONNECTION
DDC-90065001A DDC-90065001A	VFD-900613501D P-90035001D	WELL WATER PUMP P-90035001D REMOTE START/STOP WELL WATER PUMP P-90035001D BEARING TEMPERATURE	DO Al	
.50 00 0000 1/1	1 300000111			
DDC-90065001B	VFD-900613501E	WELL WATER PUMP P-90035001E IN REMOTE	DI	VIA NETWORK CONNECTION
DDC-90065001B	VFD-900613501E	WELL WATER PUMP P-90035001E IN LOCAL	DI	VIA NETWORK CONNECTION
DDC-90065001B	VFD-900613501E	WELL WATER PUMP P-90035001E RUNNING	DI	
DDC-90065001B	VFD-900613501E	WELL WATER PUMP P-90035001E TROUBLE	DI	NA NETWORK CONNECTION
DDC-90065001B	VFD-900613501E	WELL WATER PUMP P-90035001E PERMISSIVE RESET	DI	VIA NETWORK CONNECTION
DDC-90065001B DDC-90065001B	VFD-900613501E VFD-900613501E	WELL WATER PUMP P-90035001E SPEED CONTROL WELL WATER PUMP P-90035001A SPEED	AO AI	VIA NETWORK CONNECTION
DDC-90065001B	VFD-900613501E	WELL WATER PUMP P-90035001A SPEED WELL WATER PUMP P-90035001E REMOTE START/STOP	DO	VIA NETWORK CONNECTION
DDC-90065001B	P-90035001E	WELL WATER PUMP P-90035001E BEARING TEMPERATURE	Al	
DDC-90065001C	VFD-900613501F	WELL WATER PUMP P-90035001F IN REMOTE	DI	VIA NETWORK CONNECTION
DDC-90065001C DDC-90065001C	VFD-900613501F VFD-900613501F	WELL WATER PUMP P-90035001F IN LOCAL WELL WATER PUMP P-90035001F RUNNING	DI DI	VIA NETWORK CONNECTION
DDC-90065001C	VFD-900613501F	WELL WATER PUMP P-90035001F RONNING WELL WATER PUMP P-90035001F TROUBLE	DI	
DC-90065001C	VFD-900613501F	WELL WATER PUMP P-90035001F PERMISSIVE RESET	DI	VIA NETWORK CONNECTION
DDC-90065001C	VFD-900613501F	WELL WATER PUMP P-90035001F SPEED CONTROL	AO	
DC-90065001C	VFD-900613501F	WELL WATER PUMP P-90035001A SPEED	Al	VIA NETWORK CONNECTION
DDC-90065001C	VFD-900613501F	WELL WATER PUMP P-90035001F REMOTE START/STOP	DO	
DDC-90065001C	P-90035001F	WELL WATER PUMP P-90035001F BEARING TEMPERATURE	Al Al	
DDC-90065001A	FM-90031001	WELL WATER FLOW FOR HVAC	Al	
DDC-90065001A	FM-90031002	WELL WATER FLOW TO ANTENNA COOLING	Al	
DDC-90065001A	FM-90035001A	WELL WATER FLOW FROM P-90035001A,B,C	Al	
DDC-90065001B	FM-90035001B	WELL WATER FLOW FROM P-90035001D,E,F	Al	
				+
DDC-90065001A	TT-90031101	WELL WATER SUPPLY TEMPERATURE FROM P-90035001ABC	Al	
DDC-90065001A	TT-90031101	WELL WATER SUPPLY TEMPERATURE FROM P-90035001ABC	Al	<u> </u>
DDC-90065001B	TT-90031103	WELL WATER RETURN TEMPERATURE FROM BUILDING HVAC	Al	
DDC-90065001B	TT-90031104	WELL WATER RETURN TEMPERATURE FROM ANTENNA COOLING	Al	
NO 00065004 4	COV 00040404	DUMP COOLING WATER VALVE ORENIGLOGE COMMAND		1
DDC-90065001A DDC-90065001A	SOV-90016101 SOV-90016101	PUMP COOLING WATER VALVE OPEN/CLOSE COMMAND PUMP COOLING WATER VALVE STATUS	DO DI	
DDC-90065001A DDC-90065001B	SOV-90016101	PUMP COOLING WATER VALVE STATUS PUMP COOLING WATER VALVE OPEN/CLOSE COMMAND	DO	+
DDC-90065001B	SOV-90016102	PUMP COOLING WATER VALVE STATUS	DI	
DDC-90065001C	SOV-90016103	PUMP COOLING WATER VALVE OPEN/CLOSE COMMAND	DO	
DDC-90065001C	SOV-90016103	PUMP COOLING WATER VALVE STATUS	DI	
)DC 000850064	SU/ 00018104		DO	+
DDC-90065006A DDC-90065006A	SOV-90016104 SOV-90016104	PUMP COOLING WATER VALVE OPEN/CLOSE COMMAND PUMP COOLING WATER VALVE STATUS	DI	+
DDC-90065006A	SOV-90016105	PUMP COOLING WATER VALVE STATUS PUMP COOLING WATER VALVE OPEN/CLOSE COMMAND	DO	+
DDC-90065006B	SOV-90016105	PUMP COOLING WATER VALVE STATUS	DI	
DDC-90065006C	SOV-90016106	PUMP COOLING WATER VALVE OPEN/CLOSE COMMAND	DO	
DDC-90065006C	SOV-90016106	PUMP COOLING WATER VALVE STATUS	DI	
	MOV/ 00004004 A	LIV WELL WATER VALVE CONTROL		-
DDC-90065001A DDC-90065001A	MOV-90031001A MOV-90031001A	HX WELL WATER VALVE CONTROL HX WELL WATER VALVE POSITION	AO AI	
DDC-90065001A DDC-90065001B	MOV-90031001A MOV-90031001B	HX WELL WATER VALVE POSITION HX WELL WATER VALVE CONTROL	AO	
DDC-90065001B	MOV-90031001B	HX WELL WATER VALVE CONTROL HX WELL WATER VALVE POSITION	Al	<u> </u>
DDC-90065001C	MOV-90031001C	HX WELL WATER VALVE CONTROL	AO	
DDC-90065001C	MOV-90031001C	HX WELL WATER VALVE POSITION	Al	
	1401/0000/000	NACELL MATER BY BACC VALVE CONTROL		
DC-90065001A	MOV-90031002A	WELL WATER BY-PASS VALVE CONTROL	AO	1
DDC-90065001A DDC-90065001B	MOV-90031002A MOV-90031002B	WELL WATER BY-PASS VALVE POSITION WELL WATER BY-PASS VALVE CONTROL	AI AO	
DDC-90065001B	MOV-90031002B	WELL WATER BY-PASS VALVE CONTROL WELL WATER BY-PASS VALVE POSITION	AU	
JOOGOO ID	1410 4 0000 10020		/\l	<u> </u>
DC 00005004A	PT-90016101	INDUSTRIAL COLD WATER LINE PRESSURE	Al	
DDC-90065001A		INDUCTORAL COLD WATED VALVE CONTDOL	10	
DDC-90065001A	MOV-90016101	INDUSTRIAL COLD WATER VALVE CONTROL	AO	
DDC-90065001A DDC-90065001A DDC-90065001A	MOV-90016101 MOV-90016101	INDUSTRIAL COLD WATER VALVE CONTROL INDUSTRIAL COLD WATER VALVE POSITION	AO AI	

GENERAL NOTES:

- A. FOR MECHANICAL BMS NOTES, LEGENDS, AND ABBREVIATIONS, SEE SHEETS M-900001B THRU M-900007B.
- B. IN GENERAL ALL PHYSICAL I/O (DI, DO, AI, AO) LISTED HAVE CORRESPONDING DATA-LINKED "SOFT" POINTS READ FROM OR WRITTEN TO THE BMS SERVER COMPUTER FOR PROCESSING, ALARMING, AND DISPLAY BY THE BMS WORKSTATION. TO AVOID DUPLICATION, THESE DATA-LINKED POINTS HAVE BEEN EXCLUDED FROM THIS LIST. INCLUDE ALL NECESSARY PROGRAMMING TO ACCOMMODATE THESE UNLISTED "SOFT" POINTS AND ALL OTHER POINTS NECESSARY TO PROVIDE ALL MONITORING AND CONTROL FUNCTIONS DESCRIBED IN THE SEQUENCES OF OPERATION AND ELSEWHERE IN THE CONTRACT DOCUMENTS.
- C. POINT TYPES ARE DETERMINED WITH RESPECT TO THE FIELD CONTROLLER.
- D. SEE THE OVERALL BLOCK DIAGRAM FOR INFORMATION REGARDING BMS COMPONENT ARRANGEMENT AND INTERFACES TO OTHER SYSTEMS.
- E. AS PART OF THE AS-BUILT CONSTRUCTION DRAWINGS, THE CONTRACTOR SHALL COMPLETE ALL CALIBRATED RANGES (FOR ANALOG POINTS) AND PROCESS TRIP POINTS (FOR DISCRETE POINTS) IN THE "REMARKS" COLUMN. CALIBRATED RANGES AND TRIP POINTS SHALL MATCH THOSE OF THE ASSOCIATED INSTRUMENTS AS INSTALLED AND AFTER ALL FIELD ADJUSTMENTS HAVE BEEN COMPLETED.



Engineers ® Alaska District

CONTRACT NO.		
CONTRACTOR		
CITY —————	STATE	
Recommended:	Approved:	Date:
PRIME CONTRACTOR	RESIDENT ENGINEER	

ENGINEEDS	Drawn: C.DECASTRO	Dwg Scale:	Ĭ
GE, ALASKA	Reviewed: P.WU	Plot Scale:	
		File Name:	2
	Submitted: BTN)
		Drawing #:	Ā
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	0100-11-0111644		

CLEAR AFS, ALASKA LONG RANGE DISCRIMINATION RADAR

RTA

No. M 30595 EXP. 06-30-18